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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,696	11/09/2001	Yasuyuki Inoue	6920/OK024	7564

7590 06/02/2004

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805 Third Avenue  
New York, NY 10022

EXAMINER

TRIMMINGS, JOHN P

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/037,696

Applicant(s)

INOUE, YASUYUKI

Examiner

John P Trimmings

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/9/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 1 and 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Claims 1-5 are presented for examination.

#### ***Priority***

The examiner acknowledges the applicant's claim of foreign priority dated 11/9/2001.

#### ***Drawings***

1. Figures 7 and 8 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Specification***

2. The disclosure is objected to because of the following informalities: the word "measurement" should be substituted in place of the word "measured" in the following locations: page 1 lines 15 and 19, page 2 line 1, page 8 line 4. Appropriate correction is required.
3. The disclosure is objected to because of the following informalities: page 2 line 16 recites, "the expected value data generating unit", but the examiner believes it should read, "the expected data generating unit". Appropriate correction is required.

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4. The disclosure is objected to because of the following informalities: page 14 line 21 recites, "the data associated the measurement of with the measurements", but the examiner believes it should read, "the data associated with the measurements".

Appropriate correction is required.

5. The disclosure is objected to because of the following informalities: page 15 line 22 recites, "step S48 (step 47).", but the examiner believes it should read, "step S48.".

Appropriate correction is required.

#### ***Claim Objections***

6. Claim 1 is objected to because of the following informalities: line 2 recites, "generates the measured data", but the examiner believes it should read, "generates measurement data". Appropriate correction is required.

7. Claim 4 is objected to because of the following informalities: line 2 recites, "to overwrite the subsequent associated data", but the examiner believes it should read, "to overwrite subsequent associated data". Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 1 recites the following limitations:

" the test device" in line 2.

" the input measurement conditions " in line 3.

"the measurement result data" in line 6.

"said test device" in line 6.

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"the determination result " in line 9.  
"the log memory" in line 10.  
"the associated data" in line 10-11.  
"said measurement result data" in line 11.  
"said measurement input data" in line 12.  
"the log memory" in line 13.  
"said associated data" in line 14.  
"the log memory" in line 14-15.  
"the preset write termination conditions" in line 15.

There is insufficient antecedent basis for these limitations in the claim.

9. Claim 2 recites the following limitations:

"said associated data" in line 2.  
"the log memory" in line 2.  
"the write termination conditions" in line 3.

There is insufficient antecedent basis for these limitations in the claim.

10. Claim 3 recites the following limitations:

"said associated data" in line 2.  
"the log memory" in line 2.  
"the test device" in line 3.

There is insufficient antecedent basis for these limitations in the claim.

11. Claim 4 recites the following limitations:

"said log memory" in line 1.  
"the associated data" in line 3.

There is insufficient antecedent basis for these limitations in the claim.

12. Claim 5 recites the following limitations:

"said log memory" in line 2.  
"the test device" in line 3.

There is insufficient antecedent basis for these limitations in the claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art, and in view of Le et al., U.S. Patent No. 6578169.

As per Claim 1:

The applicant's prior art admission begins on page 2 of the Specification and continues through page 7, and uses figures 7 and 8 as references to the prior art. All limitations set forth in Claim 1 are therein taught in the description of the prior art, but the prior art does not teach; wherein said data log system unit writes this associated data into the log memory for a predetermined period even after any of said associated data or the address of the log memory satisfy the preset write termination conditions that terminate the writing. However, in an analogous art, Le et al. does teach this feature in column 9 lines 8-17, and FIG.9 counter 43. The counter is used to count the number of test pattern fails, and the feature terminates testing when a specified number of write termination conditions (fails) is reached. And Le et al. in column 1 lines 66-67 and column 2 lines 1-9 boasts of an advantage of the invention being a failure log memory of reduced capacity, using a new data compaction method. One with ordinary skill in the art, by combining the test fail counter of Le et al. with the prior admitted art, would have derived a better control of test termination. And one with ordinary skill in the

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art at the time of the invention, motivated as such by Le et al., would have combined the references.

As per Claim 2:

Le et al. further teaches a semiconductor test apparatus according to claim 1 wherein said data log system continues to write said associated data into the log memory over an extended time range indicated by input write extension conditions (the start and stop registers 45 and 46 in FIG.9), even after the write termination conditions have been satisfied (the counter 43 of FIG.9). In other words, in the art of Le et al., the operation would continue until the stop register reached the termination point even though counter 43 clocked out. And in view of the motivation previously cited, the claim is rejected.

As per Claim 3:

The admitted prior art further teaches a semiconductor test apparatus according to claim 1 wherein said data log system writes said associated data into a predetermined address of the log memory at each time unit in which a determination about the pass or failure of the test device is made (see page 3 of the application Specification).

As per Claim 4:

The admitted prior art further teaches a semiconductor test apparatus according to claim 1 wherein said log memory has a predetermined address range, and is structured so as to overwrite the subsequent associated data from the head address



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after writing the associated data in the final address (see page 6 of the application Specification).

As per Claim 5:

The admitted prior art further teaches a semiconductor test apparatus according to claim 1 wherein said data log system increments the address of said log memory at each time unit that a determination of the pass or failure of the test device is made, and writes in sequence said associated data (see page 6 of the application Specification).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P Trimmings whose telephone number is 703-305-0714. The examiner can normally be reached on Monday through Thursday, 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on 703-305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John P Trimmings  
Examiner  
Art Unit 2133

jpt



Albert DeCady  
Primary Examiner